ABSTRACT

TITLE: A CLINICAL STUDY ON PREVALENCE OF HYPOTHYROIDISM IN DIAGNOSED CASES OF GALL STONES

INTRODUCTION:

The explanations for possible relationship between hypothyroidism and gall stones are.

1) Disturbance of lipid metabolism in hypothyroidism causes increase in serum cholesterol level which leads to supersaturation of bile with cholesterol
2) Low bile flow in hypothyroid patients.
3) Sphincter of oddi has thyroxine receptors and thyroxine has direct prorelaxing effect on sphincter of oddi.
4) In hypothyroidism, the effect of UDP glucuronyl transferase get decreased. So increase in unconjugated bilirubin result in formation of pigment stones.
5) In animal model (Rabbits), thyroxine usage dissolves the fatty diet induced gall stones.

AIMS:

1) To study the prevalence of hypothyroidism in patients diagnosed with cholelithiasis/ choledocholithiasis.
2) To assess if thyroid profile is warranted in patients with biliary stone disease.

Materials and methods: This is a cross sectional study conducted in Tirunelveli medical college. 100 patients with USG evidence of cholelithiasis/ choledocholithiasis were evaluated with basic investigations and additionally

thyroid function test and USG thyroid were done. Prevalence of clinical/subclinical hypothyroidism in biliary stone patients were studied

RESULTS:

Among 100 patients, 27% were males; 73% were females. Most of the Gall stone patients were in the age group of 40-49 years. Male to female ratio: 1:2.7. Females were the predominant group. In 100 gall stone patients , 21 patients were found to be hypothyroid (21%), 79 patients (79%) found to be Euthyroid. Among 21 hypothyroid patients, 4 patients (19.1%) were males and 17 patients (80.9%) were females. Most of gall stone patients with hypothyroidism were found to be in the age group of 40-49 years of age. 18 patients (18%) had subclinical Hypothyroidism and gall stones. 3 patients (3%) had clinical Hypothyroidism).

CONCLUSION:

Hypothyroidism is one of the probable risk factor for developing biliary stones. Screening of biliary stone patient with TFT will help to detect undiagnosed hypothyroidism.

KEYWORDS: Cholelithiasis, Choledocholithiasis, Subclinical Hypothyroidism, Clinical Hypothyroidism.